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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,438	01/23/2004	Andrew M. Hatch	HSTI 0135 PUS1/H50006AHST	6831
35312 7590 01/04/2011 BROOKS KUSHMAN P.C./ HENKEL CORPORATION 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER DOUYON, LORNA M	
			ART UNIT 1761	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/763,438	Applicant(s) HATCH ET AL.	
	Examiner Lorna M. Douyon	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-10, 14, 16, 17, 80, 81, 84-86, 88, 89, 92-94, 98, 99 and 101-103 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 99 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-10, 14, 16, 17, 80, 81, 84-86, 88, 89, 92-94, 98 and 101-103 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. This action is responsive to the amendment filed on October 19, 2010.
2. Claims 1-4, 7-10, 14, 16-17, 80-81, 84-86, 88-89, 92-94, 98-99, 101-103 are pending. Claims 5, 6, 11-13, 15, 18-79, 82-83, 87, 90-91, 95-97 and 100 are cancelled. Claims 1, 7, 10, 14, 80, 81, 86, 89, 92 and 98 are currently amended.
3. The rejection of claims 89 and 100 under 35 U.S.C. 112, first paragraph is withdrawn in view of Applicants' amendment.
4. The rejection of claims 4 and 103 under 35 U.S.C. 112, second paragraph is withdrawn in view of Applicants' amendment.
5. **Claims 4, 10, 86 and 92** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, line 5, and claim 92, line 5, the phrase "octylphenoxy pilothouse ethanol" is erroneus. Please note that the claims submitted on April 22, 2010 states "octylphenol polyethoxy ethanol".

Claims 10 and 86 are indefinite because they fail to further limit the claims. Please note that "R₁" is already defined in the same manner in claim 1 or 80, respectively.

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6. Claims 1-4, 7-10, 14, 16-17, 80-81, 84-86, 88-89, 92-94, 98 and 103 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. (US Patent No. 6,214,777), hereinafter "Li" for the reasons set forth in the previous office action and which is repeated below for Applicants' convenience.

Li teaches a lubricant composition which is used to treat or lubricate containers (see col. 1, lines 8-10), like aluminum cans (see col. 8, line 66), which comprises neutralizing agents, surfactants, water and water-conditioning agents (see col. 6, lines 41-43). Useful neutralizing agents include the alkali metal hydroxides and are present in an amount to adjust the pH of the composition to a range of about 3 to about 9.5 (see col. 6, lines 44-57). Suitable surfactants include nonionic surfactants (see col. 6, lines 59-67). Particularly suitable nonionic surfactants are the alkoxyated alcohols having the general formula $R^{10}O((CH_2)_mO)_n$ wherein R^{10} is an aliphatic group having from about 8 to about 24 carbon atoms, m is a whole number from 1 to about 5, and n is a number from 1 to about 40 which represents the average number of ethylene oxide groups on the molecule (see col. 7, lines 18-25), and can be used in an amount of about 0.5 to about 30 percent by weight of the composition (see col. 7, lines 26-30). Other surfactants include ethoxylated alkylphenols and polyoxyalkylene oxide block copolymers (see col. 7, lines 1-17). Generally, the total surfactant concentration ranges from about 1 wt% to 50 wt%, and one or more surfactants can be used (see col. 7, lines 50-53). Li, however, fails to specifically disclose a cleaning composition having a water-break-free percent from 84% to 100% as required in claims 1 and 98, or from 67% to 100% as required in claim 80; a composition comprising an ethoxylate of an alcohol

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having a formula wherein the linear alcohol ethoxylate has an alkyl group and ethoxy group as those recited, and another nonionic surfactant in amounts as those recited, and cloud point and pH of the composition as those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the composition of Li to have a similar water-break-free percent as those recited because similar ingredients have been utilized.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared a composition comprising a combination of nonionic surfactants in their optimum proportions wherein one contains a 40 mole ethoxy group, and another with a lower ethoxy group because it is taught by Li at col. 7, lines 52-53 that one or more surfactants may be used, and to optimize the ethylene oxide and alkyl groups of the nonionic surfactants because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to the water-break-free percent and cloud point of the composition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect said properties to be within those recited because

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similar ingredients have been utilized. "Products of identical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (fed. Cir. 1990). See MPEP 2112.01 II.

With respect to the pH of the composition, as the word "about" permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), the lower pH limit of about 3 may be considered to read on pH less than 2. In the alternative, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, see *Titanium Metals Corp. of America v. Banner*, 778F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.051.

7. Claims 1-4, 7-10, 14, 16-17, 80-81, 84-85, 88-89, 92-94, 98, 101-103 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yianakopoulos (US Patent No. 5,462,697) for the reasons set forth in the previous office action and which is repeated below for Applicants' convenience.

Yianakopoulos teaches a cleaning composition for cleaning hard surfaces in the form of a dilute oil-in-water microemulsion which comprises about 0.1 to about 15% of a water-mixable nonionic surfactant, 1% to 10% of at least one organic acid cosurfactant, and 10% to 85% of water, said proportions being based upon the total weight of the composition (see col. 4, lines 3-23; 40-52; col. 8, lines 27-29). The nonionic surfactant

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includes the condensation products of a higher alcohol (e.g., an alkanol containing about 8 to 18 carbon atoms in a straight or branched chain configuration) condensed with about 5 to 30 moles of ethylene oxide (see col. 8, lines 47-51). Yianakopoulos also teaches that the acidic all purpose hard surface cleaning composition comprises approximately 0.1% to 30 wt% of at least one surfactant selected from the group consisting of nonionic surfactants and anionic surfactants (see col. 4, lines 43-45, col. 15, lines 64-67). Examples of different nonionic surfactants are disclosed in col. 8, line 27 to col. 9, line 67, and one example is ethylene oxide-propylene oxide condensates of primary alcohols. The pH of the microemulsion cleaner is usually 1-5, preferably 1-4, and more preferably 1.5-3.5 (see col. 14, lines 60-62). Yianakopoulos, however, fails to specifically disclose (1) a cleaning composition comprising a nonionic wherein the ethoxylate of an alcohol has 12 to 80 carbon atoms and 20 to 80 mole ethoxylate or 12 to 35 carbon atoms and 10-41 mole ethoxylate, and another nonionic surfactant different from the first, as required in the independent claims; (2) a cleaning composition having a water-break-free percent from 84% to 100% as required in claims 1 and 98, or from 67% to 100% as required in claim 80; (3) a cleaning composition which is capable of cleaning an exterior wall of an aluminum can such that the percent of total surface area of the exterior wall which supports a continuous film of water is greater than 50% after the aluminum can is cleaned with the cleaning composition as required in claim 3; (4) the cloud point of the cleaning composition as required in claims 2 and 81; and (5) the ethoxylate of an alcohol having a mixture of straight and branched alkyl as required in claim 7.

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared an acidic cleaning composition comprising one nonionic surfactant wherein the ethoxylate group and alkyl group are within those recited, and another nonionic surfactant different from the first because Yianakopoulos teaches "at least one nonionic surfactants" and to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the composition of Yianakopoulos to exhibit a water-break-free percent within those recited because similar components having overlapping proportions have been utilized.

With respect to difference (3), it has been held that the recitation that an element is "adapted to" perform or is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. The recitation of a new intended use for an old product does not make a claim to that old product patentable, see *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997).

With respect to difference (4), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect said property to be within those recited because similar ingredients have been utilized. "Products of identical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (fed. Cir. 1990). See MPEP 2112.01 II.

With respect to difference (5), the combination of the straight and branched chains in the nonionic surfactant of Yianakopoulos (see col. 8, lines 47-51) is likely to be obvious when it does no more than yield predictable results.

Allowable Subject Matter

8. Claim 99 stands allowed for the reasons set forth in the previous office action.

Response to Arguments

9. Applicants' arguments filed October 19, 2010 have been fully considered but they are not persuasive.

With respect to the obviousness rejection based separately upon Li and Yianakopoulos, Applicants argue that the independent claims have been amended in the manner as suggested by the Examiner in paragraph 15 of the previous Office Action except for the lower limit of the ethoxylate has been amended to be "10" rather than "20", and the water break-free percent in claim 80 has a lower limit of "67" rather than "84".

The Examiner maintains the obviousness rejection based separately upon Li and Yianakopoulos for the same reasons as stated in paragraphs 6 and 7 above. The Examiner appreciates the amendment to the claims, however, lowering the number of ethoxylates from the suggested "20 mole ethoxylate" to "10 mole ethoxylate" would not be commensurate in scope with the showing on pages 26-28 of the specification. Please note lines 21-23 on pages 27, wherein there are 13 carbon atoms in the alcohol, the number of ethoxylates are 12, 15 and 16, respectively and page 28, line 6, wherein the carbon atom in the alcohol is 14, and the number of ethoxylate is 12, and all these carbon atoms with their corresponding ethoxylates read on the required "R₁" (i.e., 12-15 carbon atoms) and "number of ethoxylates" (i.e., 10 to 41) of the present independent claims 1, 80 and 98, however, the average water-break-free percentages are unsatisfactory. Applicants also stated on page 27, lines 3-5 that "The data reveals that for all carbon lengths considered (referring to Table 7) ethoxylates of 20 or more all

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exhibited superior water-break-free percent.” The Examiner proposed the allowable subject matter disclosed in paragraph 15 of the previous office action in view of the showing on pages 26-28 wherein the ethoxylated alcohols having 12 to 25 carbon atoms and 20 to 41 ethoxylates exhibited superior water-break-free percent. Other than those proposed, the showing is not commensurate in scope with the present claims.

Conclusion

10. Applicants’ amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/
Primary Examiner, Art Unit 1761

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